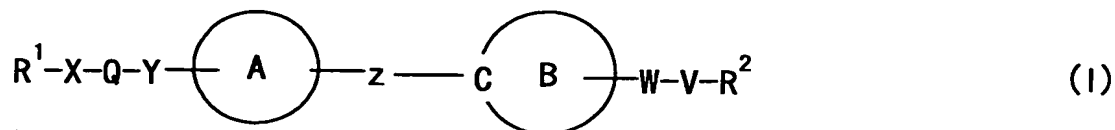


## Claims

1. A compound represented by the formula:



5 wherein

$R^1$  is an optionally substituted 5-membered heterocyclic group;

X, Y and V

10 are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3</sup>(OR<sup>4</sup>)-, -NR<sup>5</sup>-, -CONR<sup>6</sup>-, -NR<sup>6</sup>CO-, -CSNR<sup>6</sup>-, -NR<sup>6</sup>CS- or -CONR<sup>6</sup>NR<sup>7</sup>- ( $R^3$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^4$  is a hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

20 Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

25 Z is -(CH<sub>2</sub>)<sub>n</sub>-Z<sup>1</sup>- or -Z<sup>1</sup>-(CH<sub>2</sub>)<sub>n</sub>- (n is an integer of 0 to 8 and Z<sup>1</sup> is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -NR<sup>8</sup>-, -CONR<sup>8</sup>-, -NR<sup>8</sup>CO-, -CSNR<sup>8</sup>- or -NR<sup>8</sup>CS- ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));

30 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

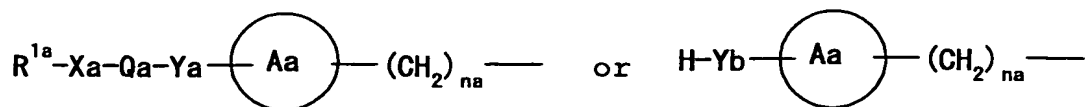
$R^2$  is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [ $R^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $-OR^{12}$  ( $R^{12}$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  ( $R^{13}$  and  $R^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or  $R^{13}$  and  $R^{14}$  are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

20 provided that

1)  $-W-V-R^2$  is not  $-Wa-(C=O)-R^a$  [ $Wa$  is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^cR^d$  ( $R^c$  and  $R^d$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and  $R^c$  and  $R^d$  are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)],

2) ring A and ring B do not have a substituent represented by the formula:  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above),

3) ring B does not have, on a ring-constituting N atom,  
a substituent represented by the formula:



wherein

5  $R^{1a}$  is an optionally substituted hydrocarbon group  
or an optionally substituted heterocyclic  
group;

Xa and Ya

10 are the same or different and each is a bond,  
an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-,  
-SO<sub>2</sub>-, -CR<sup>3a</sup>(OR<sup>4a</sup>)-, -NR<sup>5a</sup>-, -CONR<sup>6a</sup>- or -NR<sup>6a</sup>CO-  
(R<sup>3a</sup> is a hydrogen atom or an optionally  
substituted hydrocarbon group, R<sup>4a</sup> is a hydrogen  
atom or a hydroxyl-protecting group, R<sup>5a</sup> is a  
15 hydrogen atom, an optionally substituted  
hydrocarbon group or an amino-protecting group,  
R<sup>6a</sup> is a hydrogen atom or an optionally  
substituted hydrocarbon group);

20 Qa is a divalent hydrocarbon group having 1 to 20  
carbon atoms;

ring Aa is an aromatic ring optionally further having  
1 to 3 substituents;

na is an integer of 1 to 8; and

25 Yb is an oxygen atom, a sulfur atom or -NR<sup>6a</sup>- (R<sup>6a</sup> is  
as defined above),

4) -X-Q-Y- is not -(CH<sub>2</sub>)<sub>na</sub>- (na is an integer of 1 to 8),

5) when the nitrogen-containing heterocycle represented  
by ring B is a pyridine ring, the ring B does not  
have a further substituent, W is a divalent  
30 hydrocarbon group having 1 to 20 carbon atoms, V  
is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally  
substituted heterocyclic group,

6) when R<sup>1</sup> has a substituent represented by the formula:  
-Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above), W is  
a divalent hydrocarbon group having 1 to 20 carbon  
atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an  
optionally substituted heterocyclic group,

except

5- {2- [4- (5-methyl-2-phenyl-1,3-oxazol-4-  
yl)methoxyphenyl]ethyl}-4-methoxymethoxymethyl-2-phenyl-  
1,3-oxazole;

10 (5- {2- [4- (5-methyl-2-phenyl-1,3-oxazol-4-  
yl)methoxyphenyl]ethyl}-2-phenyl-1,3-oxazol-4-  
yl)methanol;

(5- {2- [4- (5-methyl-2-phenyl-1,3-oxazol-4-  
yl)methoxyphenyl]ethyl}-2-phenyl-1,3-oxazol-4-

15 yl)acetonitrile;

ethyl 2-ethoxycarbonyl-3- (5- {2- [4- (5-methyl-2-phenyl-  
1,3-oxazol-4-yl)methoxyphenyl]ethyl}-2-phenyl-1,3-  
oxazol-4-yl)propionate;

methyl 3- (4- { [2- (2-furyl)-5-methyl-1,3-oxazol-4-

20 ylmethoxy]-3-methoxybenzyl}oxy)-1-phenyl-1H-pyrazole-5-  
carboxylate;

[3- (4- { [2- (2-furyl)-5-methyl-1,3-oxazol-4-ylmethoxy]-3-  
methoxybenzyl}oxy)-1-phenyl-1H-pyrazol-5-yl]methanol;

3- (4- { [2- (2-furyl)-5-methyl-1,3-oxazol-4-ylmethoxy]-3-  
25 methoxybenzyl}oxy)-1-phenyl-1H-pyrazole-5-carbaldehyde;

and

[3- (4- { [2- (2-furyl)-5-methyl-1,3-oxazol-4-ylmethoxy]-3-  
methoxybenzyl}oxy)-1-phenyl-1H-pyrazol-5-yl]acetonitrile,  
or a salt thereof.

30

2. The compound of claim 1, wherein the 5-membered  
heterocyclic group for R<sup>1</sup> is a 5-membered aromatic  
heterocyclic group.

3. The compound of claim 2, wherein the 5-membered aromatic heterocyclic group is oxazolyl, thiazolyl or triazolyl.
- 5 4. The compound of claim 1, wherein X is a bond.
5. The compound of claim 1, wherein Q is a C<sub>1-6</sub> alkylene or a C<sub>2-6</sub> alkenylene.
- 10 6. The compound of claim 1, wherein Y is an oxygen atom.
7. The compound of claim 1, wherein the nitrogen-containing heterocycle represented by ring B is a pyrazole ring, an oxazole ring or a thiazole ring.
- 15 8. The compound of claim 1, wherein the substituent that ring B may further have is a hydrocarbon group.
9. The compound of claim 8, wherein the hydrocarbon
- 20 group is a C<sub>1-10</sub> alkyl group, a C<sub>7-13</sub> aralkyl group or a C<sub>6-14</sub> aryl group.
10. The compound of claim 1, wherein V is a bond.
- 25 11. The compound of claim 1, wherein R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) (R<sup>9</sup> and R<sup>10</sup> are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or R<sup>9</sup> and R<sup>10</sup> are optionally bonded to form an optionally substituted ring) or an optionally
- 30 substituted heterocyclic group.
12. The compound of claim 1, wherein R<sup>2</sup> is an optionally substituted heterocyclic group.

13. The compound of claim 1; wherein the aromatic ring represented by ring A is a benzene ring.

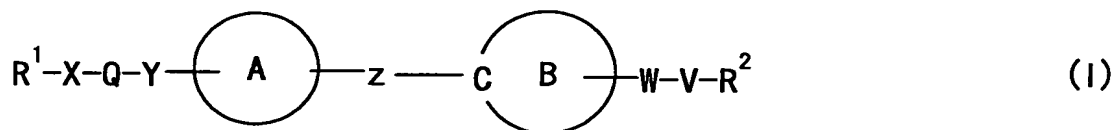
14. The compound of claim 1, wherein  $Z^1$  is an oxygen atom.

5

15. The compound of claim 1, wherein W is a  $C_{1-6}$  alkylene or a  $C_{2-6}$  alkenylene; V is a bond; and  $R^2$  is  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring) or an optionally substituted heterocyclic group.

16. A pharmaceutical composition comprising the compound represented by the formula:

15



wherein

$R^1$  is an optionally substituted 5-membered heterocyclic group;

20

X, Y and V

are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-CR^3(OR^4)-$ ,  $-NR^5-$ ,  $-CONR^6-$ ,  $-NR^6CO-$ ,  $-CSNR^6-$ ,  $-NR^6CS-$  or  $-CONR^6NR^7-$  ( $R^3$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^4$  is a hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

25

30

Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

5 Z is  $-(CH_2)_n-Z^1-$  or  $-Z^1-(CH_2)_n-$  (n is an integer of 0 to 8 and  $Z^1$  is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-NR^8-$ ,  $-CONR^8-$ ,  $-NR^8CO-$ ,  $-CSNR^8-$  or  $-NR^8CS-$  ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));

10 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

R<sup>2</sup> is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  (R<sup>9</sup> and R<sup>10</sup> are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or R<sup>9</sup> and R<sup>10</sup> are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [R<sup>11</sup> is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $-OR^{12}$  (R<sup>12</sup> is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  (R<sup>13</sup> and R<sup>14</sup> are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or R<sup>13</sup> and R<sup>14</sup> are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

20

25

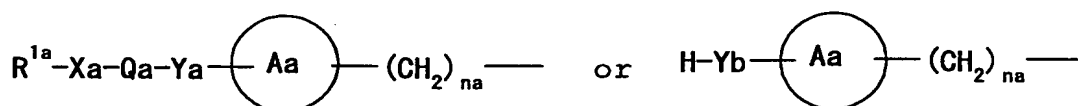
30

provided that

1)  $-W-V-R^2$  is not  $-Wa-(C=O)-R^a$  [Wa is a saturated

divalent hydrocarbon group having 1 to 20 carbon atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^cR^d$  ( $R^c$  and  $R^d$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and  $R^c$  and  $R^d$  are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",

- 2) ring A and ring B do not have a substituent represented by the formula:  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above),
- 3) ring B does not have, on a ring-constituting N atom, a substituent represented by the formula:



wherein

$R^{1a}$  is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

$Xa$  and  $Ya$

are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-CR^{3a}(OR^{4a})-$ ,  $-NR^{5a}-$ ,  $-CONR^{6a}-$  or  $-NR^{6a}CO-$  ( $R^{3a}$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^{4a}$  is a hydrogen atom or a hydroxyl-protecting group,  $R^{5a}$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group,  $R^{6a}$  is a hydrogen atom or an optionally substituted hydrocarbon group);

$Qa$  is a divalent hydrocarbon group having 1 to 20

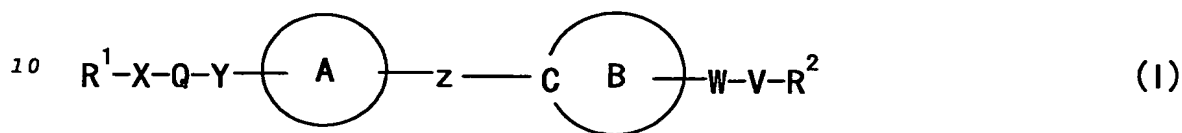


- carbon atoms;  
ring Aa is an aromatic ring optionally further having  
1 to 3 substituents;  
na is an integer of 1 to 8; and  
5 Yb is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is  
as defined above),  
4)  $-X-Q-Y-$  is not  $-(CH_2)_{na}-$  (na is an integer of 1 to 8),  
5) when the nitrogen-containing heterocycle represented  
by ring B is a pyridine ring, the ring B does not  
10 have a further substituent, W is a divalent  
hydrocarbon group having 1 to 20 carbon atoms, V  
is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally  
substituted heterocyclic group,  
6) when  $R^1$  has a substituent represented by the formula:  
15  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above), W is  
a divalent hydrocarbon group having 1 to 20 carbon  
atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an  
optionally substituted heterocyclic group,  
or a salt thereof or a prodrug thereof.  
20  
17. The pharmaceutical composition of claim 16, which is  
an agent for the prophylaxis or treatment of diabetes  
mellitus.  
25 18. The pharmaceutical composition of claim 16, which is  
an agent for the prophylaxis or treatment of  
hyperlipidemia.  
19. The pharmaceutical composition of claim 16, which is  
30 an agent for the prophylaxis or treatment of impaired  
glucose tolerance.  
20. The pharmaceutical composition of claim 16, which is  
an agent for the prophylaxis or treatment of obesity.

21. The pharmaceutical composition of claim 16, which is an agent for the prophylaxis or treatment of hypertension.

5

22. A retinoid-related receptor function regulating agent, which comprises the compound represented by the formula:



wherein

$R^1$  is an optionally substituted 5-membered heterocyclic group;

X, Y and V

15 are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3</sup>(OR<sup>4</sup>)-, -NR<sup>5</sup>-, -CONR<sup>6</sup>-, -NR<sup>6</sup>CO-, -CSNR<sup>6</sup>-, -NR<sup>6</sup>CS- or -CONR<sup>6</sup>NR<sup>7</sup>- ( $R^3$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^4$  is a hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

20 Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

25 ring A is an aromatic ring optionally further having 1 to 3 substituents;

30 Z is -(CH<sub>2</sub>)<sub>n</sub>-Z<sup>1</sup>- or -Z<sup>1</sup>-(CH<sub>2</sub>)<sub>n</sub>- (n is an integer of 0 to 8 and Z<sup>1</sup> is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -NR<sup>8</sup>-, -CONR<sup>8</sup>-, -

$\text{NR}^8\text{CO-}$ ,  $\text{-CSNR}^8\text{-}$  or  $\text{-NR}^8\text{CS-}$  ( $\text{R}^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));  
 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;  
 5 W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and  
 $\text{R}^2$  is a hydrogen atom, a cyano group,  $\text{-PO(OR}^9\text{)(OR}^{10}\text{)}$  ( $\text{R}^9$  and  $\text{R}^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted  
 10 hydrocarbon group, or  $\text{R}^9$  and  $\text{R}^{10}$  are optionally bonded to form an optionally substituted ring),  $\text{-COR}^{11}$  [ $\text{R}^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $\text{-OR}^{12}$  ( $\text{R}^{12}$  is a  
 15 hydrogen atom or an optionally substituted hydrocarbon group) or  $\text{-NR}^{13}\text{R}^{14}$  ( $\text{R}^{13}$  and  $\text{R}^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an  
 20 optionally substituted acyl group or an optionally substituted hydroxy group, or  $\text{R}^{13}$  and  $\text{R}^{14}$  are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted  
 25 heterocyclic group,

provided that

- 1)  $\text{-W-V-R}^2$  is not  $\text{Wa-(C=O)-R}^a$  [ $\text{Wa}$  is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and  $\text{R}^a$  is  $\text{-OR}^b$  ( $\text{R}^b$  is a hydrogen atom or an  
 30 optionally substituted hydrocarbon group) or  $\text{-NR}^c\text{R}^d$  ( $\text{R}^c$  and  $\text{R}^d$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and  $\text{R}^c$  and  $\text{R}^d$

are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",

2) ring A and ring B do not have a substituent

5 represented by the formula:  $-W^a-(C=O)-R^a$  ( $W^a$  and  $R^a$  are as defined above),

3) ring B does not have, on a ring-constituting N atom, a substituent represented by the formula:



10 wherein

$R^{1a}$  is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

$X^a$  and  $Y^a$

15 are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-CR^{3a}(OR^{4a})-$ ,  $-NR^{5a}-$ ,  $-CONR^{6a}-$  or  $-NR^{6a}CO-$  ( $R^{3a}$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^{4a}$  is a hydrogen atom or a hydroxyl-protecting group,  $R^{5a}$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group,  $R^{6a}$  is a hydrogen atom or an optionally substituted hydrocarbon group);

25  $Q^a$  is a divalent hydrocarbon group having 1 to 20 carbon atoms;

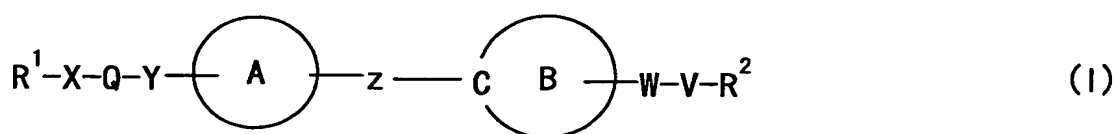
ring  $A^a$  is an aromatic ring optionally further having 1 to 3 substituents;

$na$  is an integer of 1 to 8; and

30  $Y^b$  is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is as defined above),

4)  $-X-Q-Y-$  is not  $-(CH_2)_{na}-$  ( $na$  is an integer of 1 to 8),

- 5) when the nitrogen-containing heterocycle represented by ring B is a pyridine ring, the ring B does not have a further substituent, W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally substituted heterocyclic group,
- 6) when R<sup>1</sup> has a substituent represented by the formula:  
 -Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally substituted heterocyclic group,  
 or a salt thereof or a prodrug thereof.
23. The agent of claim 22, which is a peroxisome proliferator-activated receptor ligand.
24. The agent of claim 22, which is a retinoid X receptor ligand.
25. An agent for improving insulin resistance, which comprises the compound represented by the formula:



wherein

- R<sup>1</sup> is an optionally substituted 5-membered heterocyclic group;

X, Y and V

- are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3</sup>(OR<sup>4</sup>)-, -NR<sup>5</sup>-, -CONR<sup>6</sup>-, -NR<sup>6</sup>CO-, -CSNR<sup>6</sup>-, -NR<sup>6</sup>CS- or -CONR<sup>6</sup>NR<sup>7</sup>- (R<sup>3</sup> is a hydrogen atom or an optionally substituted hydrocarbon group, R<sup>4</sup> is a

hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

Z is  $-(CH_2)_n-Z^1-$  or  $-Z^1-(CH_2)_n-$  ( $n$  is an integer of 0 to 8 and  $Z^1$  is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-NR^8-$ ,  $-CONR^8-$ ,  $-NR^8CO-$ ,  $-CSNR^8-$  or  $-NR^8CS-$  ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));

ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

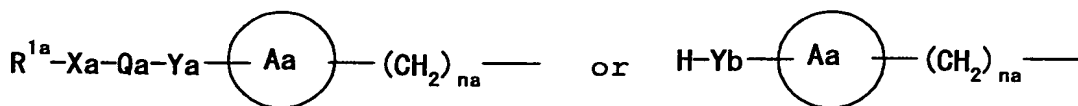
W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

$R^2$  is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [ $R^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $-OR^{12}$  ( $R^{12}$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  ( $R^{13}$  and  $R^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or  $R^{13}$  and  $R^{14}$  are

optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

5 provided that

- 1)  $-W-V-R^2$  is not  $-Wa-(C=O)-R^a$  [ $Wa$  is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^cR^d$  (10  $R^c$  and  $R^d$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and  $R^c$  and  $R^d$  are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",
- 15 2) ring A and ring B do not have a substituent represented by the formula:  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above),
- 20 3) ring B does not have, on a ring-constituting N atom, a substituent represented by the formula:



wherein

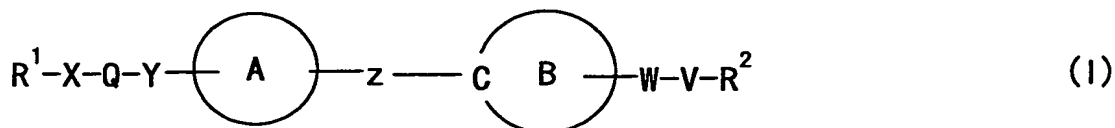
25  $R^{1a}$  is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

$Xa$  and  $Ya$

are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ , 30  $-SO_2-$ ,  $-CR^{3a}(OR^{4a})-$ ,  $-NR^{5a}-$ ,  $-CONR^{6a}-$  or  $-NR^{6a}CO-$  ( $R^{3a}$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^{4a}$  is a hydrogen

- atom or a hydroxyl-protecting group,  $R^{5a}$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group,  $R^{6a}$  is a hydrogen atom or an optionally substituted hydrocarbon group);
- Qa is a divalent hydrocarbon group having 1 to 20 carbon atoms;
- ring Aa is an aromatic ring optionally further having 1 to 3 substituents;
- na is an integer of 1 to 8; and
- Yb is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is as defined above),
- 4)  $-X-Q-Y-$  is not  $-(CH_2)_n-$  (n is an integer of 1 to 8),
- 5) when the nitrogen-containing heterocycle represented by ring B is a pyridine ring, the ring B does not have a further substituent, W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally substituted heterocyclic group,
- 6) when  $R^1$  has a substituent represented by the formula:
- $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally substituted heterocyclic group,
- or a salt thereof or a prodrug thereof.

26. A method for the prophylaxis or treatment of diabetes mellitus in a mammal, which comprises administering the compound represented by the formula:



wherein



$R^1$  is an optionally substituted 5-membered heterocyclic group;

$X$ ,  $Y$  and  $V$

are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-CR^3(OR^4)-$ ,  $-NR^5-$ ,  $-CONR^6-$ ,  $-NR^6CO-$ ,  $-CSNR^6-$ ,  $-NR^6CS-$  or  $-CONR^6NR^7-$  ( $R^3$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^4$  is a hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

$Q$  is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

$Z$  is  $-(CH_2)_n-Z^1-$  or  $-Z^1-(CH_2)_n-$  ( $n$  is an integer of 0 to 8 and  $Z^1$  is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-NR^8-$ ,  $-CONR^8-$ ,  $-NR^8CO-$ ,  $-CSNR^8-$  or  $-NR^8CS-$  ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));

ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

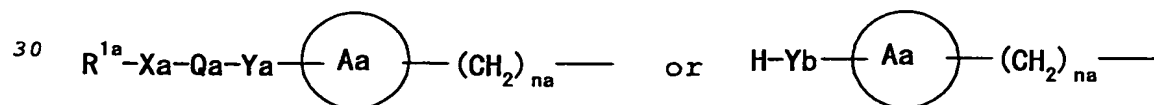
$W$  is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

$R^2$  is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [ $R^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally

substituted heterocyclic group,  $-OR^{12}$  ( $R^{12}$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  ( $R^{13}$  and  $R^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or  $R^{13}$  and  $R^{14}$  are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

provided that

- 1)  $-W-V-R^2$  is not " $Wa-(C=O)-R^a$  [ $Wa$  is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^cR^d$  ( $R^c$  and  $R^d$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and  $R^c$  and  $R^d$  are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",
- 2) ring A and ring B do not have a substituent represented by the formula:  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above),
- 3) ring B does not have, on a ring-constituting N atom, a substituent represented by the formula:



wherein

$R^{1a}$  is an optionally substituted hydrocarbon group

or an optionally substituted heterocyclic group;

Xa and Ya

are the same or different and each is a bond,  
an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-,  
-SO<sub>2</sub>-, -CR<sup>3a</sup>(OR<sup>4a</sup>)-, -NR<sup>5a</sup>-, -CONR<sup>6a</sup>- or -NR<sup>6a</sup>CO-  
(R<sup>3a</sup> is a hydrogen atom or an optionally substituted hydrocarbon group, R<sup>4a</sup> is a hydrogen atom or a hydroxyl-protecting group, R<sup>5a</sup> is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, R<sup>6a</sup> is a hydrogen atom or an optionally substituted hydrocarbon group);

Qa is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring Aa is an aromatic ring optionally further having 1 to 3 substituents;

na is an integer of 1 to 8; and

Yb is an oxygen atom, a sulfur atom or -NR<sup>6a</sup>- (R<sup>6a</sup> is as defined above),

4) -X-Q-Y- is not -(CH<sub>2</sub>)<sub>na</sub>- (na is an integer of 1 to 8),

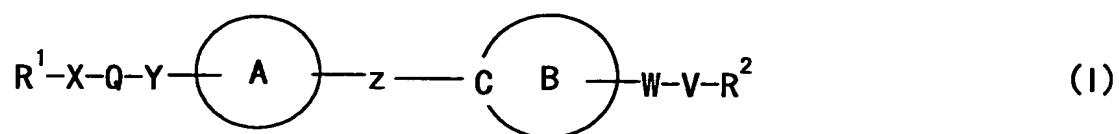
5) when the nitrogen-containing heterocycle represented by ring B is a pyridine ring, the ring B does not have a further substituent, W is a divalent

hydrocarbon group having 1 to 20 carbon atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally substituted heterocyclic group,

6) when R<sup>1</sup> has a substituent represented by the formula:  
-Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally substituted heterocyclic group,

or a salt thereof or a prodrug thereof to the mammal.

27. Use of the compound represented by the formula:



wherein

5  $R^1$  is an optionally substituted 5-membered heterocyclic group;

X, Y and V

are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3</sup>(OR<sup>4</sup>)-, -NR<sup>5</sup>-, -CONR<sup>6</sup>-, -NR<sup>6</sup>CO-, -CSNR<sup>6</sup>-, -NR<sup>6</sup>CS- or -CONR<sup>6</sup>NR<sup>7</sup>- (R<sup>3</sup> is a hydrogen atom or an optionally substituted hydrocarbon group, R<sup>4</sup> is a hydrogen atom or a hydroxyl-protecting group, R<sup>5</sup> is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and R<sup>6</sup> and R<sup>7</sup> are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

15 Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

20 Z is -(CH<sub>2</sub>)<sub>n</sub>-Z<sup>1</sup>- or -Z<sup>1</sup>-(CH<sub>2</sub>)<sub>n</sub>- (n is an integer of 0 to 8 and Z<sup>1</sup> is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -NR<sup>8</sup>-, -CONR<sup>8</sup>-, -NR<sup>8</sup>CO-, -CSNR<sup>8</sup>- or -NR<sup>8</sup>CS- (R<sup>8</sup> is a hydrogen atom or an optionally substituted hydrocarbon group));

25 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

30 W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

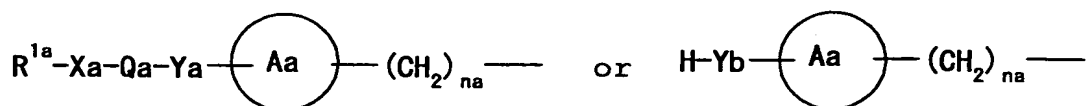
R<sup>2</sup> is a hydrogen atom, a cyano group, -PO(OR<sup>9</sup>)(OR<sup>10</sup>)

(R<sup>9</sup> and R<sup>10</sup> are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or R<sup>9</sup> and R<sup>10</sup> are optionally bonded to form an optionally substituted ring), -COR<sup>11</sup> [R<sup>11</sup> is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, -OR<sup>12</sup> (R<sup>12</sup> is a hydrogen atom or an optionally substituted hydrocarbon group) or -NR<sup>13</sup>R<sup>14</sup> (R<sup>13</sup> and R<sup>14</sup> are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or R<sup>13</sup> and R<sup>14</sup> are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

provided that

- 1) -W-V-R<sup>2</sup> is not "Wa-(C=O)-R<sup>a</sup> [Wa is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and R<sup>a</sup> is -OR<sup>b</sup> (R<sup>b</sup> is a hydrogen atom or an optionally substituted hydrocarbon group) or -NR<sup>c</sup>R<sup>d</sup> (R<sup>c</sup> and R<sup>d</sup> are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and R<sup>c</sup> and R<sup>d</sup> are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",
- 2) ring A and ring B do not have a substituent represented by the formula: -Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above),
- 3) ring B does not have, on a ring-constituting N atom,

a substituent represented by the formula:



wherein

$R^{1a}$  is an optionally substituted hydrocarbon group  
or an optionally substituted heterocyclic  
group;

$Xa$  and  $Ya$

are the same or different and each is a bond,  
an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  
 $-SO_2-$ ,  $-CR^{3a}(OR^{4a})-$ ,  $-NR^{5a}-$ ,  $-CONR^{6a}-$  or  $-NR^{6a}CO-$   
( $R^{3a}$  is a hydrogen atom or an optionally  
substituted hydrocarbon group,  $R^{4a}$  is a hydrogen  
atom or a hydroxyl-protecting group,  $R^{5a}$  is a  
hydrogen atom, an optionally substituted  
hydrocarbon group or an amino-protecting group,  
 $R^{6a}$  is a hydrogen atom or an optionally  
substituted hydrocarbon group);

$Qa$  is a divalent hydrocarbon group having 1 to 20  
carbon atoms;

ring  $Aa$  is an aromatic ring optionally further having  
1 to 3 substituents;

$na$  is an integer of 1 to 8; and

$Yb$  is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is  
as defined above),

4)  $-X-Q-Y-$  is not  $-(CH_2)_{na}-$  ( $na$  is an integer of 1 to 8),

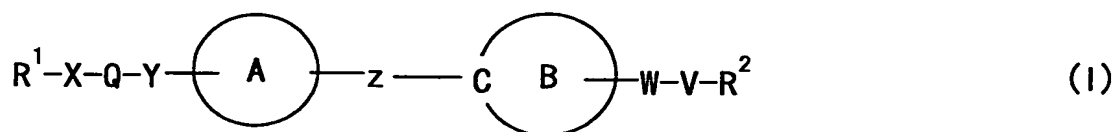
5) when the nitrogen-containing heterocycle represented  
by ring  $B$  is a pyridine ring, the ring  $B$  does not  
have a further substituent,  $W$  is a divalent  
hydrocarbon group having 1 to 20 carbon atoms,  $V$   
is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally  
substituted heterocyclic group,

6) when  $R^1$  has a substituent represented by the formula:

-Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and R<sup>2</sup> is -PO(OR<sup>9</sup>)(OR<sup>10</sup>) or an optionally substituted heterocyclic group,

5 or a salt thereof or a prodrug thereof for the production of an agent for the prophylaxis or treatment of diabetes mellitus.

28. A method for the prophylaxis or treatment of obesity  
10 in a mammal, which comprises administering the compound represented by the formula:



wherein

15 R<sup>1</sup> is an optionally substituted 5-membered heterocyclic group;

X, Y and V

are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3</sup>(OR<sup>4</sup>)-, -NR<sup>5</sup>-, -CONR<sup>6</sup>-, -NR<sup>6</sup>CO-, -CSNR<sup>6</sup>-,  
20 -NR<sup>6</sup>CS- or -CONR<sup>6</sup>NR<sup>7</sup>- (R<sup>3</sup> is a hydrogen atom or an optionally substituted hydrocarbon group, R<sup>4</sup> is a hydrogen atom or a hydroxyl-protecting group, R<sup>5</sup> is a hydrogen atom, an optionally substituted  
25 hydrocarbon group or an amino-protecting group, and R<sup>6</sup> and R<sup>7</sup> are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group);

Q is a divalent hydrocarbon group having 1 to 20  
30 carbon atoms;

ring A is an aromatic ring optionally further having 1 to 3 substituents;

Z is  $-(CH_2)_n-Z^1-$  or  $-Z^1-(CH_2)_n-$  (n is an integer of 0 to 8 and  $Z^1$  is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-NR^8-$ ,  $-CONR^8-$ ,  $-NR^8CO-$ ,  $-CSNR^8-$  or  $-NR^8CS-$  ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));  
 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;  
 W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and  
 10  $R^2$  is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [ $R^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $-OR^{12}$  ( $R^{12}$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  ( $R^{13}$  and  $R^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or  $R^{13}$  and  $R^{14}$  are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

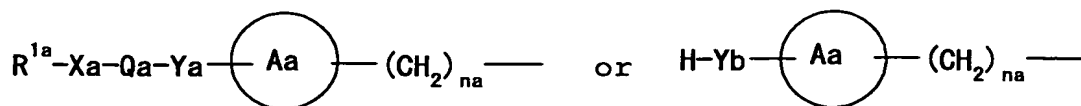
provided that

30 1)  $-W-V-R^2$  is not  $-Wa-(C=O)-R^a$  [ $Wa$  is a saturated divalent hydrocarbon group having 1 to 20 carbon atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^cR^d$  ( $R^c$  and  $R^d$  are the same or different and each is a



hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group or an acyl group, and R<sup>c</sup> and R<sup>d</sup> are optionally bonded to form an optionally substituted ring together with the adjacent nitrogen atom)]",

- 2) ring A and ring B do not have a substituent represented by the formula: -Wa-(C=O)-R<sup>a</sup> (Wa and R<sup>a</sup> are as defined above),
- 3) ring B does not have, on a ring-constituting N atom, a substituent represented by the formula:



wherein

R<sup>1a</sup> is an optionally substituted hydrocarbon group or an optionally substituted heterocyclic group;

Xa and Ya

are the same or different and each is a bond, an oxygen atom, a sulfur atom, -CO-, -CS-, -SO-, -SO<sub>2</sub>-, -CR<sup>3a</sup>(OR<sup>4a</sup>)-, -NR<sup>5a</sup>-, -CONR<sup>6a</sup>- or -NR<sup>6a</sup>CO- (R<sup>3a</sup> is a hydrogen atom or an optionally substituted hydrocarbon group, R<sup>4a</sup> is a hydrogen atom or a hydroxyl-protecting group, R<sup>5a</sup> is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, R<sup>6a</sup> is a hydrogen atom or an optionally substituted hydrocarbon group);

Qa is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring Aa is an aromatic ring optionally further having 1 to 3 substituents;

na is an integer of 1 to 8; and

Yb is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is as defined above),

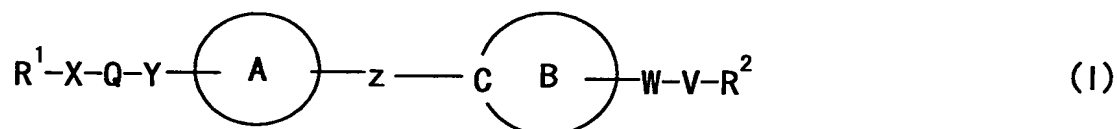
4)  $-X-Q-Y-$  is not  $-(CH_2)_n-$  ( $n$  is an integer of 1 to 8),

5) when the nitrogen-containing heterocycle represented by ring B is a pyridine ring, the ring B does not have a further substituent, W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally substituted heterocyclic group,

6) when  $R^1$  has a substituent represented by the formula:  
 $-W_a-(C=O)-R^a$  ( $W_a$  and  $R^a$  are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally substituted heterocyclic group,

or a salt thereof or a prodrug thereof to the mammal.

29. Use of the compound represented by the formula:



wherein

$R^1$  is an optionally substituted 5-membered heterocyclic group;

X, Y and V

are the same or different and each is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-CR^3(OR^4)-$ ,  $-NR^5-$ ,  $-CONR^6-$ ,  $-NR^6CO-$ ,  $-CSNR^6-$ ,  $-NR^6CS-$  or  $-CONR^6NR^7-$  ( $R^3$  is a hydrogen atom or an optionally substituted hydrocarbon group,  $R^4$  is a hydrogen atom or a hydroxyl-protecting group,  $R^5$  is a hydrogen atom, an optionally substituted hydrocarbon group or an amino-protecting group, and  $R^6$  and  $R^7$  are the same or different and each is

a hydrogen atom or an optionally substituted hydrocarbon group);

Q is a divalent hydrocarbon group having 1 to 20 carbon atoms;

5 ring A is an aromatic ring optionally further having 1 to 3 substituents;

Z is  $-(CH_2)_n-Z^1-$  or  $-Z^1-(CH_2)_n-$  (n is an integer of 0 to 8 and  $Z^1$  is a bond, an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  $-SO_2-$ ,  $-NR^8-$ ,  $-CONR^8-$ ,  $-NR^8CO-$ ,  $-CSNR^8-$  or  $-NR^8CS-$  ( $R^8$  is a hydrogen atom or an optionally substituted hydrocarbon group));

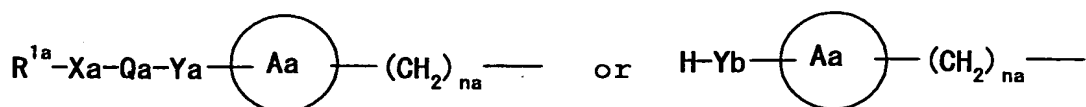
10 ring B is a nitrogen-containing heterocycle optionally further having 1 to 3 substituents;

W is a bond or a divalent hydrocarbon group having 1 to 20 carbon atoms; and

15  $R^2$  is a hydrogen atom, a cyano group,  $-PO(OR^9)(OR^{10})$  ( $R^9$  and  $R^{10}$  are the same or different and each is a hydrogen atom or an optionally substituted hydrocarbon group, or  $R^9$  and  $R^{10}$  are optionally bonded to form an optionally substituted ring),  $-COR^{11}$  [ $R^{11}$  is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group,  $-OR^{12}$  ( $R^{12}$  is a hydrogen atom or an optionally substituted hydrocarbon group) or  $-NR^{13}R^{14}$  ( $R^{13}$  and  $R^{14}$  are the same or different and each is a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted acyl group or an optionally substituted hydroxy group, or  $R^{13}$  and  $R^{14}$  are optionally bonded to form an optionally substituted ring)], an optionally substituted hydrocarbon group, or an optionally substituted heterocyclic group,

provided that

- 1)  $-W-V-R^2$  is not  $-Wa-(C=O)-R^a$  [ $Wa$  is a saturated  
divalent hydrocarbon group having 1 to 20 carbon  
atoms and  $R^a$  is  $-OR^b$  ( $R^b$  is a hydrogen atom or an  
optionally substituted hydrocarbon group) or  $-NR^cR^d$   
( $R^c$  and  $R^d$  are the same or different and each is a  
hydrogen atom, an optionally substituted  
hydrocarbon group, an optionally substituted  
heterocyclic group or an acyl group, and  $R^c$  and  $R^d$   
are optionally bonded to form an optionally  
substituted ring together with the adjacent  
nitrogen atom)]",
- 2) ring A and ring B do not have a substituent  
represented by the formula:  $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$   
are as defined above),
- 3) ring B does not have, on a ring-constituting N atom,  
a substituent represented by the formula:



wherein

$R^{1a}$  is an optionally substituted hydrocarbon group  
or an optionally substituted heterocyclic  
group;

$Xa$  and  $Ya$

are the same or different and each is a bond,  
an oxygen atom, a sulfur atom,  $-CO-$ ,  $-CS-$ ,  $-SO-$ ,  
 $-SO_2-$ ,  $-CR^{3a}(OR^{4a})-$ ,  $-NR^{5a}-$ ,  $-CONR^{6a}-$  or  $-NR^{6a}CO-$   
( $R^{3a}$  is a hydrogen atom or an optionally  
substituted hydrocarbon group,  $R^{4a}$  is a hydrogen  
atom or a hydroxyl-protecting group,  $R^{5a}$  is a  
hydrogen atom, an optionally substituted  
hydrocarbon group or an amino-protecting group,  
 $R^{6a}$  is a hydrogen atom or an optionally

substituted hydrocarbon group);

Qa is a divalent hydrocarbon group having 1 to 20 carbon atoms;

ring Aa is an aromatic ring optionally further having  
5        1 to 3 substituents;

na is an integer of 1 to 8; and

Yb is an oxygen atom, a sulfur atom or  $-NR^{6a}-$  ( $R^{6a}$  is as defined above),

4)  $-X-Q-Y-$  is not  $-(CH_2)_n-$  (na is an integer of 1 to 8),

10 5) when the nitrogen-containing heterocycle represented by ring B is a pyridine ring, the ring B does not have a further substituent, W is a divalent hydrocarbon group having 1 to 20 carbon atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an optionally  
15        substituted heterocyclic group,

6) when  $R^1$  has a substituent represented by the formula:  
 $-Wa-(C=O)-R^a$  ( $Wa$  and  $R^a$  are as defined above), W is a divalent hydrocarbon group having 1 to 20 carbon  
atoms, V is a bond and  $R^2$  is  $-PO(OR^9)(OR^{10})$  or an  
20        optionally substituted heterocyclic group,

or a salt thereof or a prodrug thereof for the production of an agent for the prophylaxis or treatment of obesity.

25